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PROFESSIONAL LOUDSPEAKERS

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10G40

LOW FREQUENCY TRANSDUCER

G40 Series

KEY FEATURES

- High power handling 400 W_{AES}
- High sensitivity: 95 dB (1W / 1m)
- 3” copper voice coil with polymide fiber glass former
- Large magnetic assembly for efficient heat disspitation
- Extended controlled displacement: X_{max} ± 7 mm
- 28 mm peak-to-peak excursion before damage
- Designed for woofer applications
- Optimized for small bass-reflex cabinets





TECHNICAL SPECIFICATIONS

Nominal diameter	250 mm	10 in
Rated impedance		8 Ω
Minimum impedance		6,6 Ω
Power capacity [1]		400 W_{AES}
Program power [2]		800 W
Sensitivity	95 dB	1W / 1m @ Z_N
Frequency range		45 - 4.000 Hz
Recom. enclosure vol.	20 / 70 l	0,7 / 2,6 ft^3
Voice coil diameter	76,2 mm	3 in
Bl factor		17 N/A
Moving mass		0,052 kg
Voice coil length		17,5 mm
Air gap height		7 mm
X_{damage} (peak to peak)		28 mm

THIELE-SMALL PARAMETERS [3]

Resonant frequency, f_s	45 Hz
D.C. Voice coil resistance, R_e	6,2 Ω
Mechanical Quality Factor, Q_{ms}	7,1
Electrical Quality Factor, Q_{es}	0,32
Total Quality Factor, Q_{ts}	0,30
Equivalent Air Volume to C_{ms}, V_{as}	49 l
Mechanical Compliance, C_{ms}	241 µm / N
Mechanical Resistance, R_{ms}	2,1 kg / s
Efficiency, η_0	1,4 %
Effective Surface Area, S_d	0,038 m^2
Maximum Displacement, X_{max} [4]	7 mm
Displacement Volume, V_d	266 cm^3
Voice Coil Inductance, L_e	0,6 mH

Notes:

[1] The power capaticty is determined according to AES2-1984 (r2003) standard.

[2] Program power is defined as power capacity + 3 dB.

[3] T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

[4] The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.

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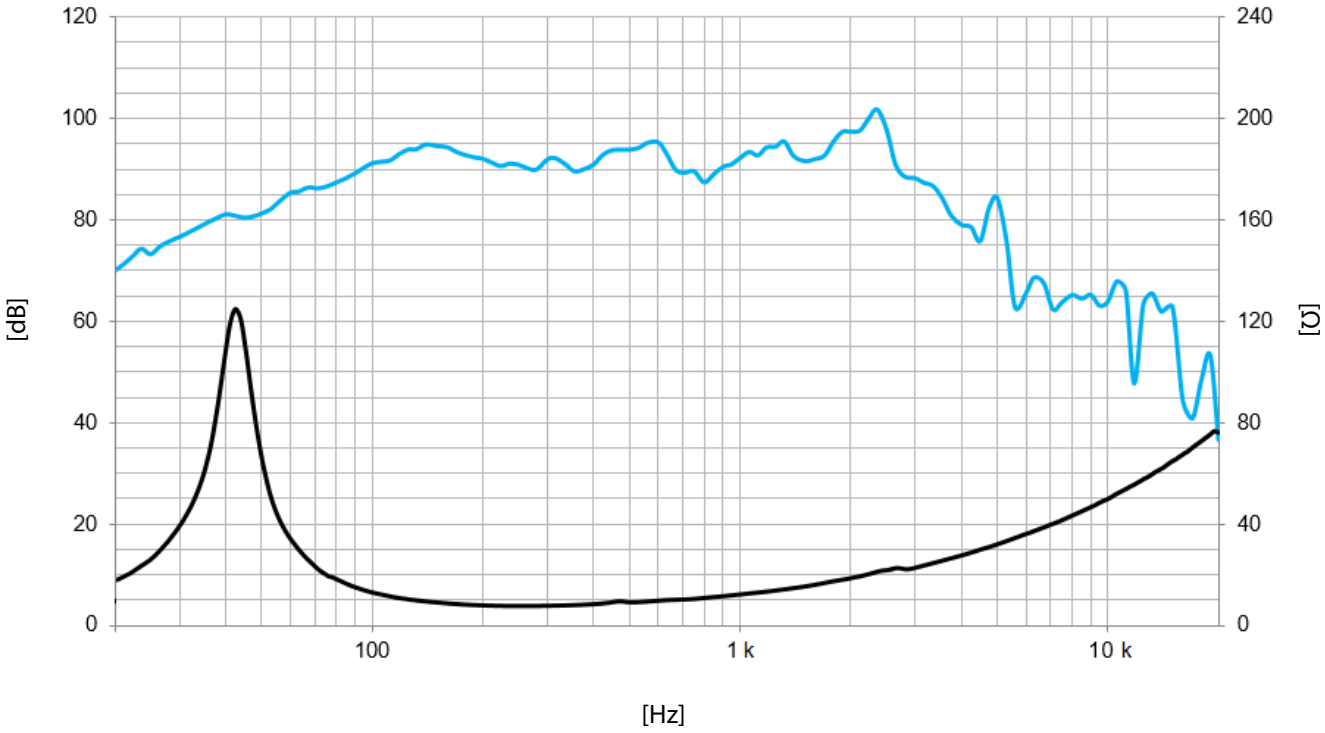
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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

MOUNTING INFORMATION

Overall diameter	260,5 mm	10,3 in
Bolt circle diameter	243,5 mm	9,6 in
Baffle cutout diameter:		
- Front mount	228 mm	9,0 in
Depth	118 mm	4,6 in
Volume displaced by driver	3,0 l	0,10 ft³
Net weight	5,7 kg	12,5 lb
Shipping weight	6,1 kg	13,4 lb

DIMENSION DRAWING

